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PATENT

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**OBJECT INSPECTION AND/OR
MODIFICATION SYSTEM AND METHOD**

ABSTRACT OF THE DISCLOSURE

A scanning probe microscopy (SPM) inspection and/or modification system which uses SPM technology and techniques. The system includes various types of microstructured SPM probes for inspection and/or modification of the object. The components of the SPM system include microstructured calibration structures. A probe may be defective because of wear or because of fabrication errors. Various types of reference measurements of the calibration structure are made with the probe or vice versa to calibrate it. The components of the SPM system further include one or more tip machining structures. At these structures, material of the tips of the SPM probes may be machined by abrasively lapping and chemically lapping the material of the tip with the tip machining structures.

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